

DUAL MODULATED VACUUM SHINGLER

ABSTRACT OF THE DISCLOSURE

A shingling apparatus for sheets of paper or paperboard includes a pair of independently operable vacuum plenums in a gap between an in-feed conveyor and a reduced speed shingling conveyor. One of the vacuum plenums decelerates an incoming sheet to shingling conveyor speed while the second vacuum plenum captures and pulls down the tail of the sheet to allow the faster moving following sheet to override the tail. This dual vacuum action enhances sheet control, requires very little vertical displacement of the sheets at the vacuum plenums, and enhances the squareness of the shingle that is formed. The system may also include a downstream shingle separator including a translating connection that assists in pulling the necessary gap between downstream shingle portion being directed into a stacker and an upstream shingle portion that is accumulated until the downstream shingle portion is stacked and discharged.